

Lake trail, August 21 another was taken from among a flock of several along the small stream entering Rice Lake from the east.

Regulus satrapa satrapa Licht. GOLDEN-CROWNED KINGLET. July 22, 1914, a male specimen was shot on the east shore of Lake Isabelle.

Hylocichla ustulata swainsoni (Tschudi). OLIVE BACKED THRUSH. 1912: Common in the region about Clear Lake during latter June and early July. 1914: Frequently seen and heard again in the first mentioned locality; August 21 an Olive-backed Thrush was caught in a mouse-trap set under an old log in deep woods at the first rapids of the Isabelle above Rice Lake. The same day another specimen was shot at a small lake one mile east of Rice Lake.

Hylocichla guttata pallasi (Cab.). HERMIT THRUSH. Common in the region about Clear Lake during July, 1914. On the 7th a nest with four eggs was found by one of my companions, Prof. N. L. Huff, in a small sphagnum bog sprinkled with low spruces and tamaracs, along the old unused portage trail around the first two rapids of the North Kawishiwi river. July 11, a male bird was shot on the Clear Lake trail opposite these rapids.

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IN THE HAUNTS OF CAIRNS' WARBLER

BY C. W. G. EIFRIG.

EVERY ornithologist, professional or otherwise, knows with what joyous anticipation one from time to time returns to the scenes of former explorations. There is a halo of romance around the places and the time of one's early efforts in ornithology, where his first love and enthusiasm led him forth on many trips, always eager, expectant, and on the verge of new discoveries. This was the writer's state of mind, when June 14, 1918, he once again found himself at Oakland, near the south-western corner of Maryland, in the so-called glade region of the Maryland Alleghanies, his ultimate goal being Accident, a quiet hamlet about twenty miles north, but still in Garret County. Nature had on her most engaging smile as I set out for my destination over the fine new state road, that connects Oakland with the Old National Pike at Keyser's Ridge. A walk or drive over this road reveals the

beauties of this charming region; it winds through fine woods, showing quite a different type of vegetation from the prairies around Chicago, then it runs along the hillsides giving one glimpses of small farms, changing off with tamarack, spruce and alder swamps in the valley, and beyond that, line upon line of the peculiar long-drawn out hills and mountains of the Alleghanies, stretching out to the horizon in bewildering fashion, until lost in blue haze. The shallow valleys here are from 2000 to 2400 feet above sea-level; the surveyor's plug before my host's house at Accident shows 2395 feet, while the highest hill nearby, Georges Hill, is marked 3004 feet. To a westerner this will seem a negligible elevation, but it is here enough to produce Canadian conditions of climate; just a little lower down along the stream valleys are of course distinctly southerly conditions, producing an overlapping and odd intermingling of Canadian and Carolinian faunae and florae, an eldorado for the nature-lover and naturalist. As there is also an abundance of pure, cool air, and a dearth of mosquitoes, it is at the same time an ideal region for the tired vacationist from the large cities.

To see what changes, if any, would be observable here since my former rambles over this region, and to add new species, if possible to my list of 'Birds of Allegany and Garret Counties' (Auk, Vol. XXI, pp. 234-250; XXXII, p. 108, etc), the next month was spent in tramping over the hills and prowling through the ravines and thickets of this section, and through those of the neighborhood of Cumberland, Allegany County. In company with a friend, who is at once a mountaineer, keen observer and student of nature, I would set out early in the morning and return in the evening tired and bedraggled, but happy.

In the cool, dark ravines along the brooks, as well as on the mountain tops, where a primeval stand of tall white pine, black spruce and hemlock is still found in a few places, and where the rhododendron flourishes, is the favorite habitat of Cairns' Warbler (*Dendroica c. cairnsi*). In my last communication on this region (Auk, XXXII, pp. 108-110), I had expressed my conviction that this subspecies should be eliminated from the 'Check-List' as indistinguishable from *D. c. caeruleascens*, but I am now "fully persuaded." The females are more distinguishable than the

males. although the difference is so slight, that the bird must be had in the hand to appreciate it. Here, in the mossy, fern-covered banks under the rhododendron, as well as in its almost impenetrable thickets the nests are located, and here the song, a rapid, explosive, ascending *dill dill drce*, may be heard on all sides. This song is indistinguishable from that of *D. c. caeruleus*.

In the same places, but staying higher up in the tall hemlocks above the rhododendrons, the Black-throated Green Warbler holds forth, here as during migration, a companion of the Black-throated Blue. But since subspecies must be made, here it seems is where a new one should be introduced. Since my first visits to this region about 1900, I was struck by the dingy appearance and small size of most of the males, though some were of normal, intense coloration. At first, I ascribed it to wear and moult, but in June warblers are at their best in appearance, and furthermore, the olive on the back seems darker, while the song is weaker. So here are differences that can be perceived when the bird is in bush or tree.

In the same habitat is found the Magnolia Warbler, only in smaller numbers. Its song here as in Canada, sounds to one like *wetsi wetsi wetsi*, accent on the next to last syllable, whereas *D. virens* seems to say *dee dee dee ah di*, accent on the antepenult.

Even less abundantly than the Magnolia is found the Blackburnian Warbler (*D. fusca*), in the same habitat. It is especially partial to the tops of hemlocks. On the 15th of June we saw a male gathering nesting material on the edge of the much traveled state road, at Bear Creek Hollow. We watched it and saw that he took it into a hemlock, about 35 feet up, ten feet out on a large, horizontal limb, where with the glasses we could make out the form of a tiny nest. A week later we got it down with much labor, only to find it empty. It is built of the thinnest dry twigs of hemlock, a little bast and fiber, and lined with horse hair; its diameter is three and a half inches over all, the cup one and three quarter by one and a half inches deep. The song of the Blackburnian is low and remarkable for its nasal and ventriloquial quality. One sang a monotonous *tsi tse tse tsunn*, another *dell dell dell tsit tsit tsitnu*, sometimes tender then again strangely muffled.

A distinct surprise among the warblers was furnished by the Canada Warbler. Since my last visit four years previously it

had increased strikingly in numbers. During a brief walk on the afternoon of my arrival, we saw and heard about twenty in the same habitat as the preceding four species, and everywhere we went we found it common, in all kinds of woods, evergreen and hardwood, second growth brush, along creeks and on dry mountain crests. Their coarse, loud, unwarbler-like alarm note was one of the commonest sounds heard. Many were carrying food, showing that the young were already out of the eggs. The old birds would fly closely about one, with their sparrow-like chirp, scolding the intruder out of their nesting range. Similarly obtrusive and solicitous were the Ovenbirds, likewise found in all kinds of woodland habitat.

Two warblers had moved in since my last visit, the Yellow-breasted Chat, and the Golden-winged Warbler. Two pairs of the former had taken up their stand in small brushy second growth, where the primeval pine, spruce and hemlock had been cut out, moving in from lower down, where it is common. A pair of the Golden-wings were observed in Kolb's Hollow, having also followed the clearings. This is a good instance of how man's interference with and changing of natural conditions promptly influences flora and fauna.

In the fringe of alders along Bear Creek and in swampy corners of the farm, the Maryland Yellow-throat can be heard, and along the creeks the two Water-Thrushes are found, *Sciurus motacilla*, and *S. u. noveboracensis*. One of the former we saw carry food. Besides these, the Chestnut-sided Warbler is common, in the same places as the Canada and its song *wi di di dereca* almost becomes monotonous. The Yellow Warbler, however, is rare; I noticed only one pair and those in my host's orchard, where one of them sang once as late as 9 o'clock in the evening.

In the same place where the odd notes of the Chat were first heard, a Catbird struck up its song and amused us greatly by suddenly weaving in the call of the Whip-poor-will. This was the only time that I heard the Whip-poor-will song during my stay, whereas formerly the hollows and hillsides resounded with it every evening. There is a sad decrease in the numbers of this bird, and I may add, the same holds good for all places where I have been of late years in Indiana, Michigan, and Illinois, every-

where a decrease from former numbers. Let us hope that it has correspondingly increased elsewhere in its range. The Brown Thrasher, Red-eyed Vireo, and Wood Pewee also seemed much less common than formerly.

Prairie Horned Larks are not uncommon breeders here. They are absent in summer below 2000 feet. A pair could usually be seen at certain places on the roads, always at the same ones. Of flycatchers the Crested is found, the Kingbird more commonly, and each orchard generally harbors one pair of the Least, also a pair of Baltimore Orioles. Bobolinks are more numerous now than formerly, as it is to be expected when agriculture spreads out at the expense of the forest. At Thayerville, at the house where President Cleveland spent his honeymoon, an Alder Flycatcher was seen in the alders lining Deep Creek. The former Lake Cleveland has disappeared and is changed into fields. Meadow-larks are common, Redwings, less so, because cattail swamps are absent; and they have to frequent the alder-bordered natural meadows. A nest of a pair was found 20 feet up in an apple tree in an orchard adjoining one of these meadows. Nearby the call of the Kingfisher could be heard over Bear Creek, as well as the song of the Cardinal.

One of the commonest songs here now is that of the Scarlet Tanager. It frequents the tops of wooded ridges, from where its strident notes could nearly always be heard, but sometimes is found in the woods on the slopes and even in hollows. It is decidedly on the increase.

In the finch and sparrow tribe, the Goldfinches are common, Indigo Buntings not rare, Vesper, Song, Field and Chipping Sparrows plentiful. With three Vesper Sparrows we had a unique experience. Coming home one evening from where I had forgotten my glasses under the Blackburnian's nesting tree, a new song made us stop below a Vesper Sparrow on a telephone wire. It was loud and musical, entirely different from the usual Vesper performance. A day or two later, on the road to Negro Mountain, I heard the same song from one of the same species, and a little farther on another one. I made sure it was the Vesper Sparrow but the song was plainly that of Bewick's Wren! My theory is that a family of Vespers was raised near the nest of a

Bewick's Wren, where they heard that bird's song all the time and learned it instead of their own. We met with no Bewicks this time, but a few are here, at least were until lately. The House Wren is increasing in numbers, and very probably Mr. Ridgway is correct when he says that the House Wren drives out Bewick's Wren. The colony of Winter Wrens, which we discovered in 1914 on Negro Mountain, was no longer there. Grasshopper Sparrows are common in alfalfa and timothy fields, as are the Towhees in the brushy second growth on the hills.

The most interesting member of the finch tribe here is the Carolina Junco, which also seems to me to be growing less common. Still it can not be called rare. It is equally distributed over the rocky slopes and tops of mountains, as well as in mossy hemlock stands, but not below about 2500 feet. Families of old and young were seen, the young being heavily streaked on the breast, something like young Chipping Sparrows. While watching the noisy antics of a pair of Ovenbirds on the road to Negro Mountain, a Junco dropped out of her nest in an invisible pocket in the low bank, opposite where a road had been cut along the hillside. The nest under overhanging roots and moss contained three eggs in the morning, in the afternoon, when I returned, only two, so I took it along. The nest, made of moss, lichen and a few plant stems on the outside and rootlets and horse hair on the inside, measures five inches in diameter, the cup two and three quarter by one and a half inches deep. The eggs are pale bluish, with a wreath of pale lavender and brown spots near the thicker end, much like those of *J. h. hycemalis* in Canada. These pockets in low or higher banks along wood roads are characteristic nesting places, also for the northern form and the nest would rarely be found, if the owners would not drop out of them and fly away at one's approach. I never found a nest on the level, chestnut-covered tops of the mountains. The song of the southern form is more sonorous and alto than that of the northern, it sounds much like the second part of the song of the Towhee. They breed twice in a season.

Of the woodpeckers we saw a few Hairy, Downy, and Red-headed, also Flickers and Yellow-bellied Sapsuckers. The Pil-eated and Redhead are decreasing in numbers. Mr. F. Burk-

hard, my companion, told me that during or after a late snow-storm in the previous April, several Flickers had been found dead, showing that even such a large and hardy species sometimes succumbs to inclement weather.

Raptors are decidedly rare here, because people shoot all they can. We saw only two Redtails in Glotfelty's primeval piece of timber in Negro Mountain, where we have seen them at each visit, probably always the same pair. Twice I saw a Sharpshinned Hawk furiously pursued by a Kingbird, that fairly screamed with rage. Turkey Vultures are still common. The old hollow logs and the many cavities between the rocks along the tops of the mountains offer good nesting sites for them, and the sheep, killed by roving dogs, no doubt furnish them with sustenance.

Among gallinaceous birds the Ruffed Grouse is still fairly common. Once we startled several, together with a Rose-breasted Grosbeak, out of a large shadbush, where they had been busily feeding on the luscious berries. I was told that foxes are a great scourge to the Grouse, killing quite a few on the nests or at least destroying the nests. The Bobwhite has sadly dwindled away; we heard its call only once, and the Wild Turkey is almost gone.

Since there are no water bodies here beside the bush-covered creeks, there are few water birds to be found. At two small artificial ponds I saw a family of Killdeer and a Spotted Sandpiper. In the house of the owner of one of the ponds, I saw mounted specimens of Pied-billed and Horned Grebes, as well as a Lesser Scaup, which occasionally drop into the pond during migration.

The only addition to the avifauna of the region covered by the list in volume XXI of 'The Auk,' was made at Cumberland, whither I went from Accident. The old trails on Savage Mountain to Wolf Gap and Finzel, on Will's Mountain to the Mason and Dixon line and others, added the warblers of the lower country to the list, such as the Hooded, Worm-eating, Prairie and Pine Warblers, and the Redstart, which should have been met with in the mountains, also Cooper's and the Broad-winged Hawk. The Swan Ponds—not Swamp Ponds as given in my former list—on the West Virginia side of the Potomac, I found ditched and drained and turned into corn fields. However, we found a family

of Upland Plovers there. Thus does man's activities play havoc with the finest natural homes of certain species of birds. The colony of Ravens, formerly located in the romantic Rocky Gap, six miles east of Cumberland, was also no more. As if to mitigate this disappointment, however, I found on July 9, a family of Blue Grosbeaks (*Guiraca c. caerulea*) on Knobley Mountain, making at least one species, and that an interesting one, to be added to the birds of western Maryland.

Oak Park, Illinois.

PATTERN DEVELOPMENT IN TEAL.

BY GLOVER M. ALLEN

AN article by Mr. Frederic H. Kennard in 'The Auk' for October 1919, describing and naming the Southern Blue-winged Teal as a distinct subspecies, brings out a point of considerable evolutionary interest, which it seems to me is worth emphasizing. The chief mark of the newly recognized race is the presence of a white superciliary stripe continuing the white crescent between the eye and bill, characteristic of the common Blue-winged Teal, and the two stripes, one on each side, meet at the back of the head and are continued medially to form a white nuchal patch of varying extent. This unusual extension of the white crescentic mark is found in the adult males only and is characteristic of the completely developed nuptial plumage in the Southern birds. A similar, though often irregular line, is sometimes seen in partially white domestic pigeons and ducks.

The formation of a definite pattern of pigmented (*i. e.*, colored) and pigmentless (*i. e.*, white) areas, particularly in birds and mammals, is a subject which has greatly interested me, and in an article in the *American Naturalist* (vol. 48, p. 385-412, 467-484, 550-566, 1914) I have endeavored to establish that in these two classes of vertebrates, white markings when present tend to occur in certain definite places. This is due to the fact that the surface